

Abstract of the Disclosure

There is provided a scanning optical system which includes a light source, a line-like image forming optical system, a polygonal mirror, and an imaging optical system. The line-like image forming optical system forms a line-like image extending in the main scanning direction in the vicinity of a reflective surface of the polygonal mirror, and if the number of reflective surfaces of the polygonal mirror is less than or equal to six and if $|m| > 1.85$, the following condition (1) is satisfied:

$$r < 5\cos(w/2f)/[2|m|\{1-\cos(w/2f)\}] \quad \dots (1)$$

where r represents a radius of an inscribed circle of the polygonal mirror, m represents a lateral magnification of the imaging optical system in the auxiliary scanning direction, f represents a focal length of the imaging optical system in the main scanning direction, and w represents half of a scanning width.